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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,902	06/21/2006	Alain Burgos	11123.0107USWO	7368
23552 MERCHANT &	7590 12/31/200 & GOULD PC	EXAMINER		
P.O. BOX 2903			KATAKAM, SUDHAKAR	
MINNEAPOLIS, MN 55402-0903			ART UNIT	PAPER NUMBER
			1621	
			MAIL DATE	DELIVERY MODE
			12/31/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/583,902	BURGOS ET AL.				
Office Action Summary	Examiner	Art Unit				
	Sudhakar Katakam	1621				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12 Au	ugust 2008.					
	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	33 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>12-24</u> is/are pending in the application.						
4a) Of the above claim(s) <u>22-24</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>12-24</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Goo the attached dotailed emice determine a lice	or the continue copies het receive	<b>u</b> .				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5)  Notice of Informal P 6)  Other:	акенк Аррикация				

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#### **9DETAILED ACTION**

## Status of the application

1. Receipt of Applicant's request for continued examination filed on 12<sup>th</sup> Aug 2008 is acknowledged.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed 12<sup>th</sup> Aug 2008 has been entered.

2. Claims 12-21 are examined on the merits in this office action.

### Claim Objections

3. Claim 12 is objected to because of the following informalities: The group X is defined before the formula (II), viz., (R4CO)<sub>m</sub>X. It should be defined after the formula (II). Appropriate correction is required.

### Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 6. Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Johnson et al** (WO 99/18065), in view of **Tinsley et al** (US 3,375,287).

Johnson et al teach a process for the production of enamide derivatives of the formula 4, prepared by reduction of oximes of the formula 2, with a reducing metal M in the presence of an acylating agent [page 14, claim 1]. The catalyst used is a complex of a transition metal M<sup>2+</sup> and a chiral phosphine ligand [see claim 2 and examples]. The reaction temperature is at moderate temperatures = 75°C, with moderate to good yields (40-85%, unoptimized) and in a high state of purity [page 5, lines 15-23]. Johnson et al also exemplifies the synthesis of N-(3,4-dihydronaphthalen-l-yl)-acetamide using Fe as the catalyst [page 10, example 5, lines 20-27]. Included is a washing step containing sodium hydroxide [page 10, lines 24-25] and the acyl derivative (acetic anhydride and acetic acid) is used as the solvent [page 10, lines 20].

The differences between the instant claims and the **Johnson et al** are as follows:

- (i) **Johnson et al** fail to teach applicant's particular hydrogenation catalyst metal;
- (ii) Johnson et al fail to teach particular form of catalyst;

(iii) **Johnson et al** fail to teach hydrogen pressure and with the particular mineral salt.

With regard to (i) and (ii) of above, **Tinsley et al** teach the equivalency of catalytic reducing metals, with the combination of various compounds, used for isomerization reactions, which include Ni, Pd, Pt, Rh, Ir, Fe and Ru (column 4, lines 1-2).

With regard to (ii) and (iii) of above, it is the position of the Examiner that one of ordinary skill in the art, at the time of the invention, would through routine and normal experimentation determine the optimization of these limitations to provide the best effective variable depending on the results desired. Thus it would be obvious in the optimization process to optimize the particular form of the catalyst, the use of hydrogen pressure and the particular mineral salt. The Applicant does not show any unusual and/or unexpected results for the limitations stated. Note that the prior art provides the same effect desired by Applicant, the production of enamide derivatives from oximes.

The claims would have been obvious because, a person of ordinary skill has a good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product, not of innovation, but of ordinary skill and common sense.

The claim would have been obvious because the design incentives or market forces provided a reason to make an adaptation, and the invention resulted from application of the prior knowledge in a predictable manner.

All the claimed elements were known in the prior art and one skilled person in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to have yielded predictable results to one of ordinary skill in the art at the time of the invention.

The Supreme Court in KSR noted that if the actual application of the technique would have been beyond the skill of one of ordinary skill in the art, then the resulting invention would have been obvious because one of ordinary skill could not have been expected to achieve it.

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time of the invention, to select a suitable hydrogenation catalyst, the particular form of the catalyst, the particular mineral salt, and to use hydrogen pressure, since Applicant's isomerization metals are well-known in the art. Absent any showing of unusual and/or unexpected results over applicant's particular catalyst metals, the art obtains the same effect on the production and purification of the enamide derivatives. The expected result would be an efficient production of enamide derivatives for the chemical and pharmaceutical industries.

# Response to Arguments

7. Applicant's arguments filed on 12<sup>th</sup> Aug 2008 have been fully considered but they are not persuasive.

Applicants' remarks in connection with the previous rejection have been addressed in the above rejection.

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With regard to the applicants' arguments for the claims 22-24, the examiner asserts that these claims are directed to an invention that is independent or distinct because an amine or an amide compound differ in chemical structure, reactivity and use from an ene-amide derivative. Furthermore, the inventions as claimed do not encompass overlapping subject matter and there is nothing of record to show them to be obvious variants. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 22-24 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### Conclusion

- 8. No claim is allowed.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

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/Sudhakar Katakam/ Examiner, Art Unit 1621

/SHAILENDRA - KUMAR/

Primary Examiner, Art Unit 1621